# Research Task 06 — AI-Generated Deep Fake Interview

Author: Bhaarat Kotak

Dataset: Syracuse Men’s Soccer 2024 (from Task 05)

## Project Overview

This project demonstrates how AI tools can be used to simulate a realistic, ESPN-style coach interview based on insights derived from the Syracuse Men’s Soccer 2024 dataset (Task 05). The interview highlights season performance recap, defensive strategy improvements, key player contributions, and a motivational closing message. The final output aimed for a ~25-second polished video, but due to AI tool limitations only one video clip with outdoor setting and partial content was generated.

## Goal of the Task

Transform insights from Task 05 into an AI-generated deep fake interview, simulate a realistic ESPN-style experience with dynamic backgrounds, locker room vibes, and crowd effects, and explore AI video generation limitations through iterative prompt engineering.

## Workflow

Step 1 — Understanding Requirements

Reviewed Task 06 instructions and identified key insights from Task 05 analysis.

Step 2 — Exploring Tools

Explored multiple AI tools for realistic video generation:  
- D-ID & HeyGen → Tested but skipped due to watermark and free-plan limitations.  
- Synthesia → Not available under student plan.  
- Gemini Veo 3 Fast → Selected for its dynamic scenes, but produced only one outdoor-style clip.

Limitations Faced:

- 3-hour cooldown between generations.  
- 7-second per clip limit.  
- Did not support dataset upload → manually summarized Task 05 insights.  
- AI editor was not able to switch backgrounds → only generated outdoor setting video with content from two prompts.

Step 3 — Building the Script & Prompts

Created an Premier League -style script using Task 05 insights:  
- Nearly equal goals scored and conceded last season.  
- Shot conversion lower than opponents.  
- Defensive improvements could raise win rate by ~30%.  
- Key players: Gabe Threadgold & Michael Acquah.

Step 4 — Generating the Clips

Attempted to generate 3 individual clips (Season Recap, Defensive Strategy & Key Players, Motivational Closing). However, Gemini Veo 3 Fast only generated one outdoor stadium video with partial content.

Step 5 — Editing Attempt

Used CapCut to attempt merging and editing clips. Due to tool limitations, the final merged video contained only the outdoor setting footage and lacked distinct press conference and locker room variations.

## Tools Used

|  |  |  |
| --- | --- | --- |
| Tool/Platform | Purpose | Outcome |
| Gemini Veo 3 Fast | AI video generation | ⚠️ Only one outdoor video generated |
| Coach Image | Realistic avatar + lip-sync | ✅ Improved realism |
| CapCut | Editing + merging | ⚠️ Limited use due to single clip |
| D-ID / HeyGen | Alternative video tools | ❌ Explored only |

## Prompts Used

Prompts were based on Task 05 analysis. The intention was to produce three segments: Season Recap (Outdoor Stadium), Defensive Strategy & Key Players (Press Conference), and Motivational Closing (Locker Room). However, the AI video editor generated only one outdoor-style clip with content aligned to two of the prompts.

## Challenges & Learnings

Challenges Faced

- AI video tool did not switch backgrounds, only generating outdoor setting video.  
- Strict cooldowns and clip limits slowed progress.  
- Dataset integration had to be manual.  
- Outputs required several refinements but realism was limited.

Key Learnings

- Accurate stats and context-rich prompts improve authenticity.  
- Syracuse coach image improved lip-sync realism.  
- Iterative refinement is critical, but tool limitations capped quality.  
- CapCut remains useful for merging, but requires multiple clips to be effective.

## Final Output

Video Duration: ~7 seconds (outdoor stadium clip)  
Style: ESPN-style Syracuse Men’s Soccer interview  
Content: Combined insights from two prompts  
Quality: Limited — only one setting generated, lacked background variations.

## Takeaway

This project highlighted both the potential and limitations of AI-powered video generation. While accurate analysis and strong prompts helped produce a realistic outdoor interview clip, the inability to generate multiple backgrounds or longer sequences showed clear tool constraints. Future attempts will require exploring alternative platforms for more professional, multi-scene outputs.